

A Population-Based Assessment Tool

Turning Information
Into Health: A
Focus on Arthritis

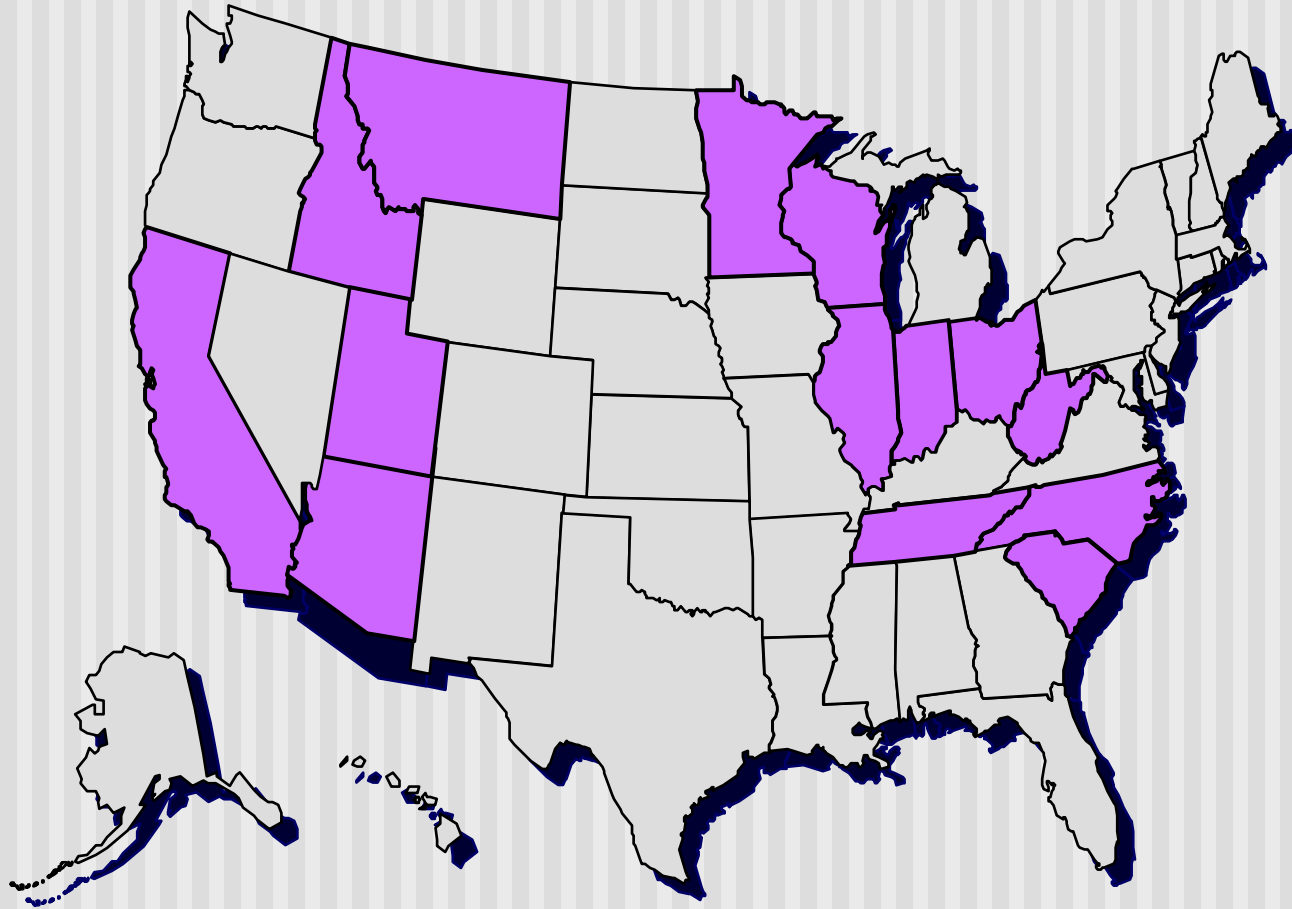


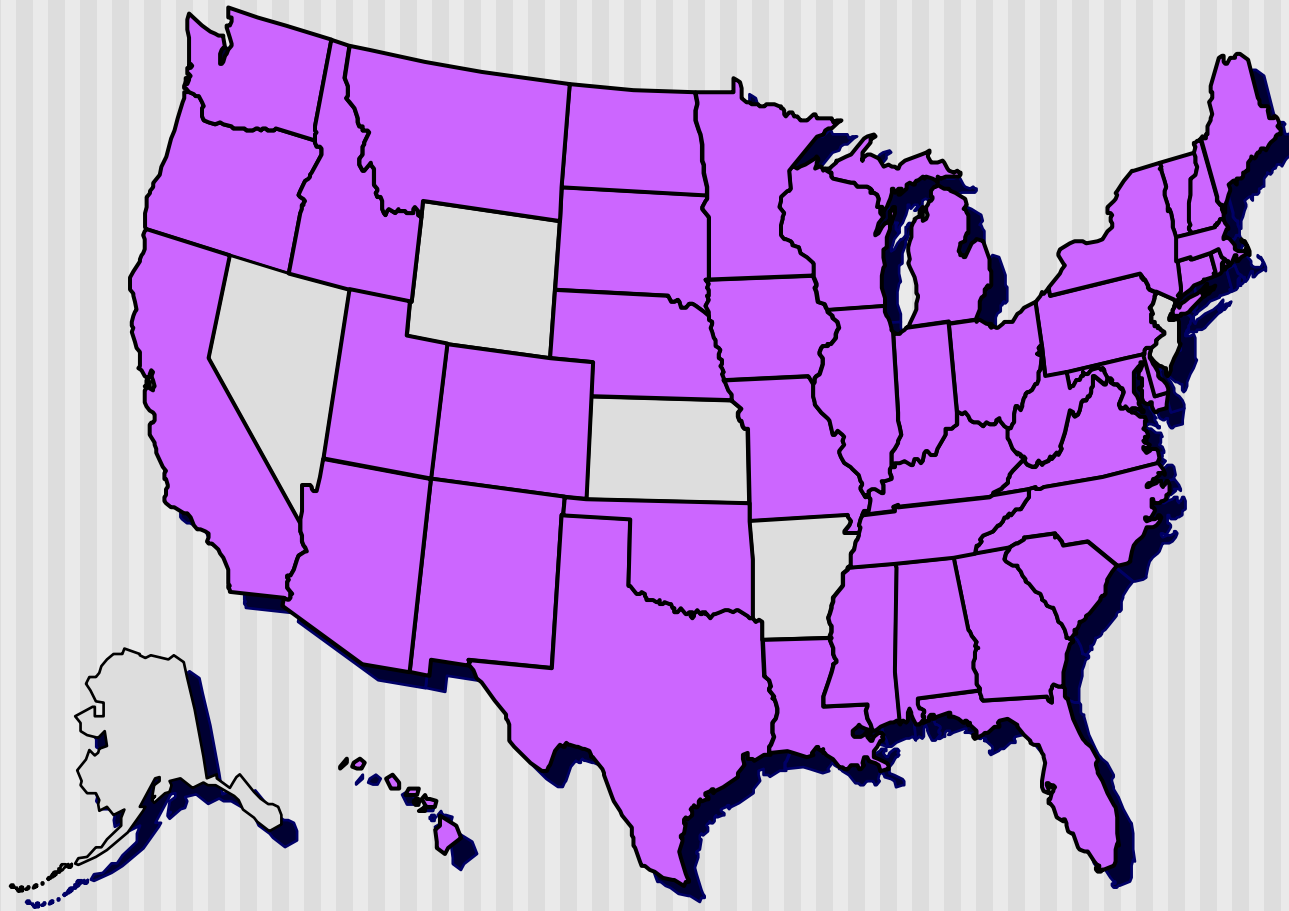
What is the Behavioral Risk Factor Surveillance System (BRFSS)?

- BRFSS is a standardized random digit dialed (RDD) telephone survey.
- Operated and funded through a state/federal partnership
- Samples adults aged 18+ years (non-institutionalized)
- Computer assisted telephone interviewing (CATI)
- Administered in Spanish and English
- Primary state-level source of data on adult health indicators, preventive health practices, and risk behaviors
- Results reported with point estimates and confidence intervals.

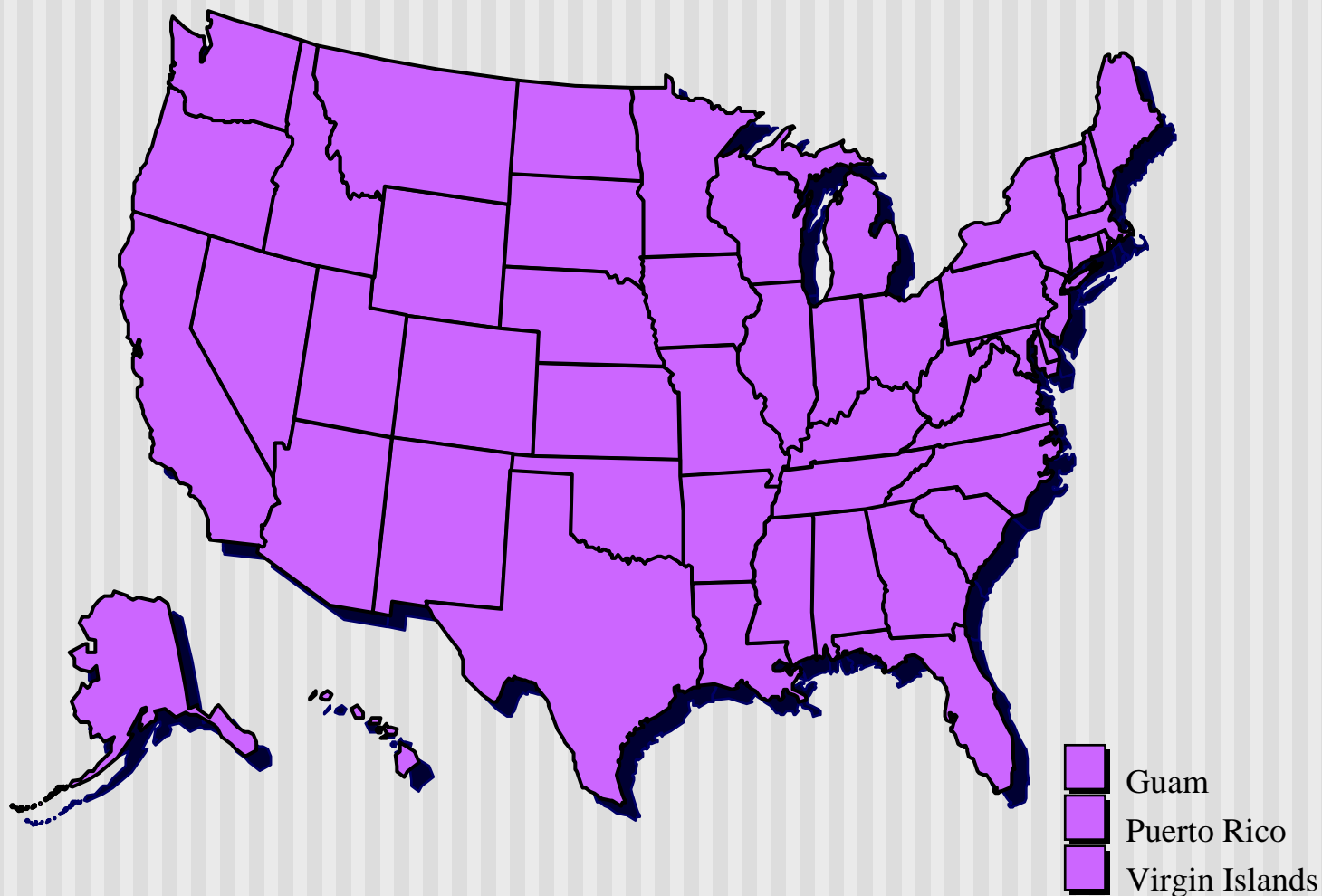
BRFSS History

- Created in the early 1980's by CDC to fill a need for state level public health data
- Focus is on modifiable risk factors for chronic diseases and other leading causes of death



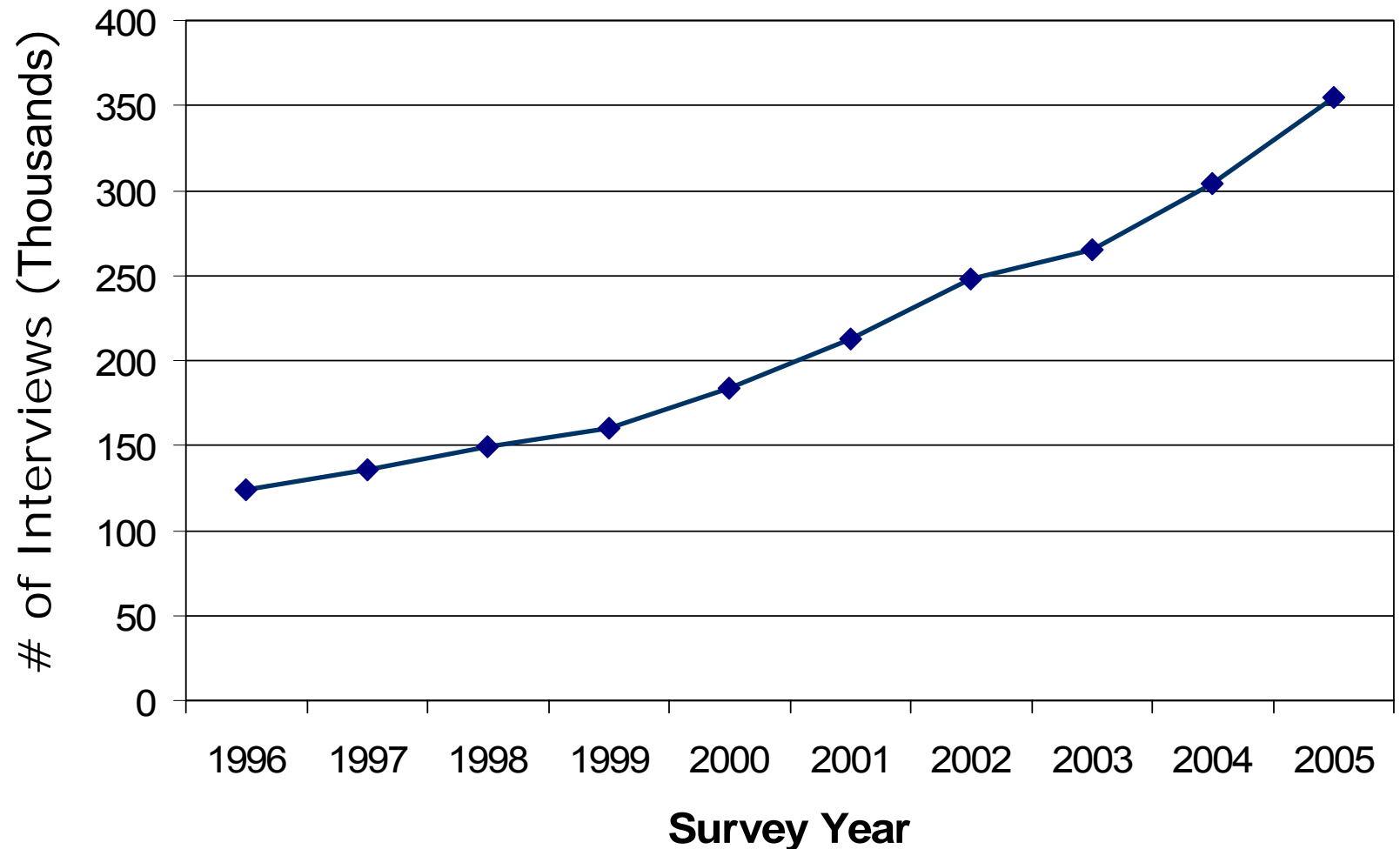


BRFSS in the U.S., today

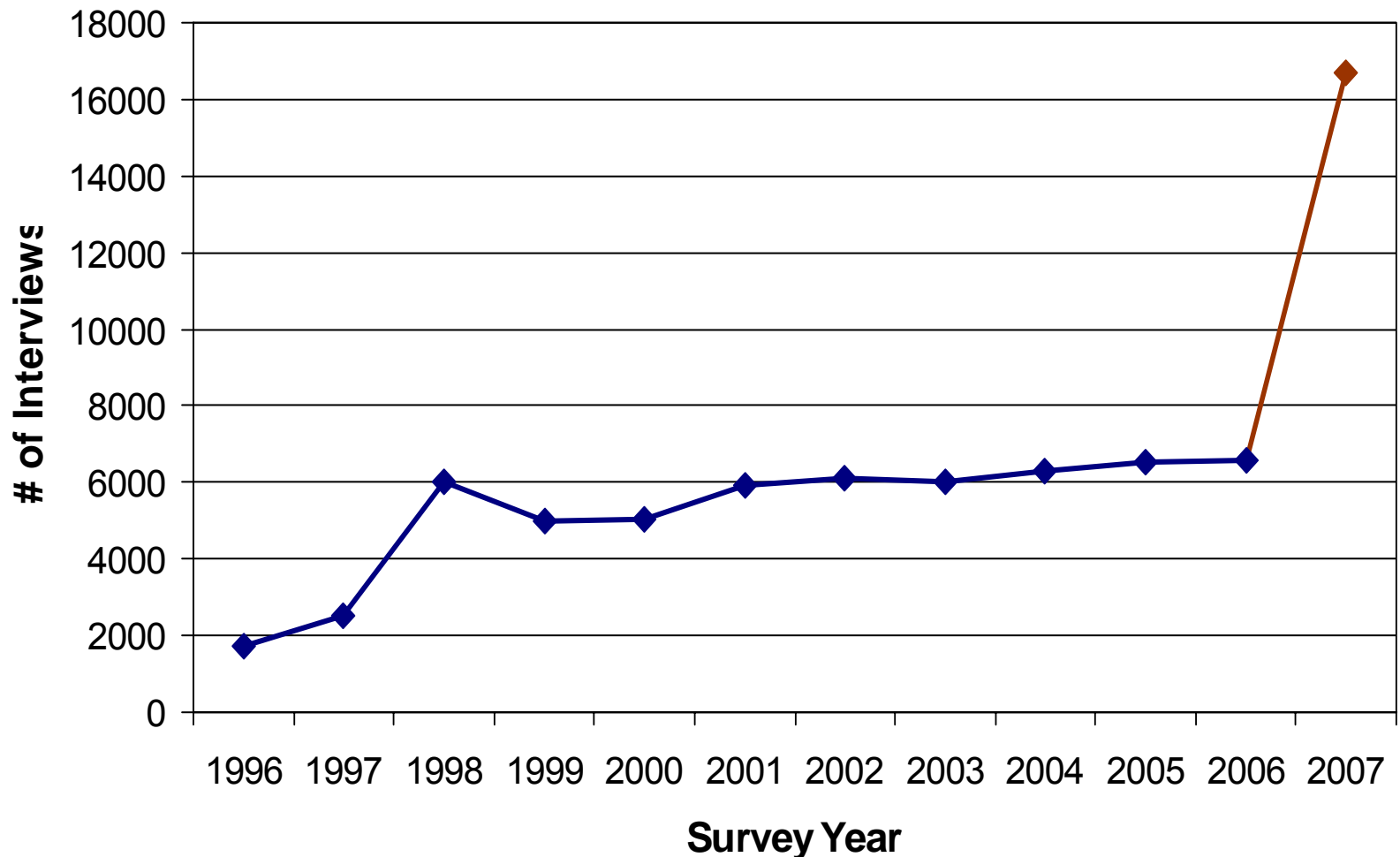


BRFSS Sample Size

U.S., 1996 - 2005



BRFSS Sample Size Texas, 1996 - 2007



BRFSS Has Many Uses for Chronic Disease Programs

- Measure trends
- Identify demographic differences
- Assess risk factors
- Measure health-related behaviors
- Measure progress toward state and national health objectives
- Address emergent and critical health issues
- Design and monitor health interventions
- Formulate policy for health initiatives

Measuring Trends

Arthritis Questions in Texas

- 1999 – 2000: Asked 6 module Q's
- 2001: 5 module Q's in core
- 2003, 2005: 5 core Q's
 - different than those asked in 1999-2001
- 2007: 5 core Q's + Arthritis Management Module
- Core questions now asked every odd year.

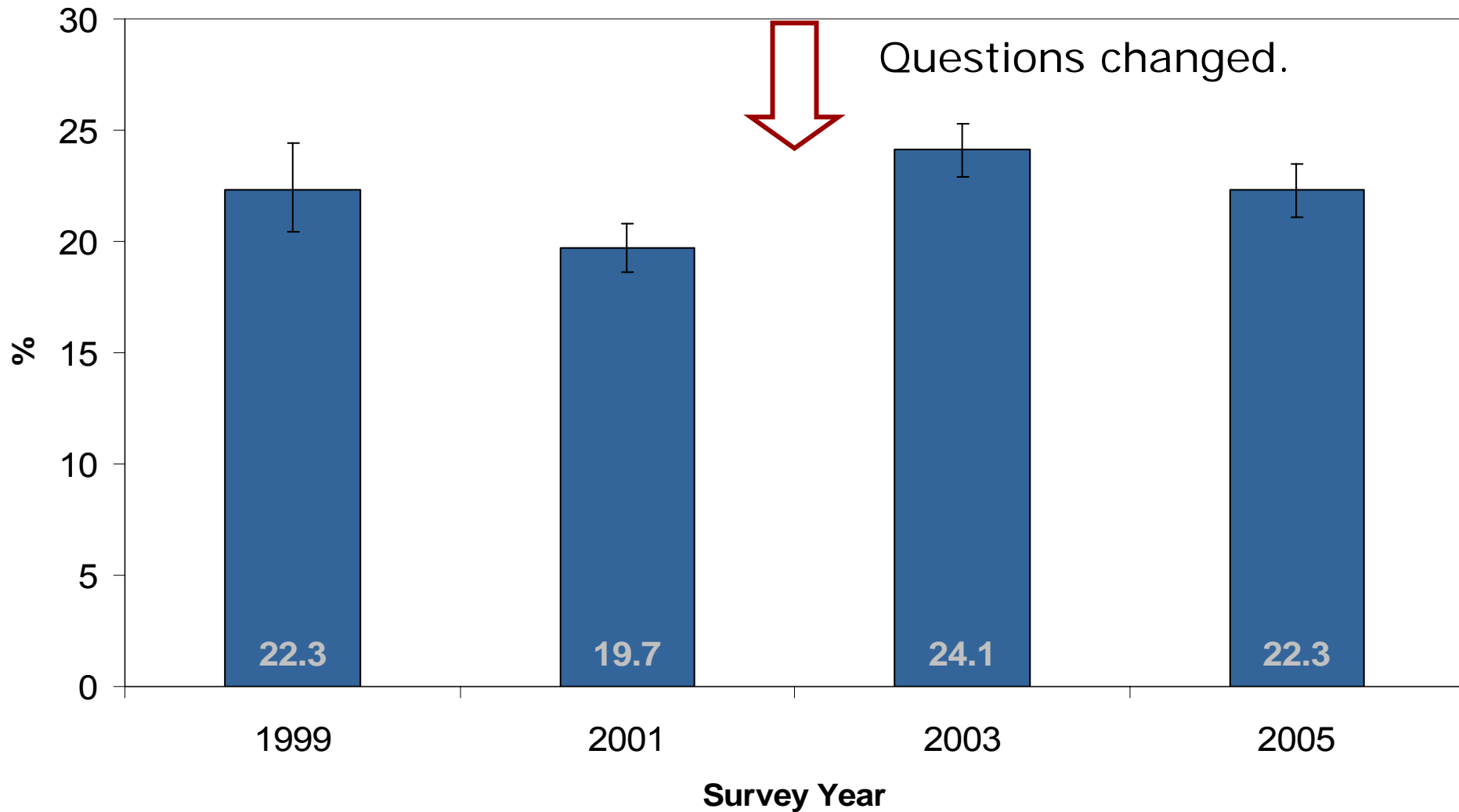
Current Arthritis Definition

- Ever been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.

Which Includes...

- rheumatism, polymyalgia rheumatica
- osteoarthritis (not osteoporosis)
- tendonitis, bursitis, bunion, tennis elbow
- carpal tunnel syndrome, tarsal tunnel syndrome
- joint infection, Reiter's syndrome
- ankylosing spondylitis; spondylosis
- rotator cuff syndrome
- connective tissue disease, scleroderma, polymyositis, Raynaud's syndrome
- vasculitis (giant cell arteritis, Henoch-Schonlein purpura, Wegener's granulomatosis, polyarteritis nodosa)

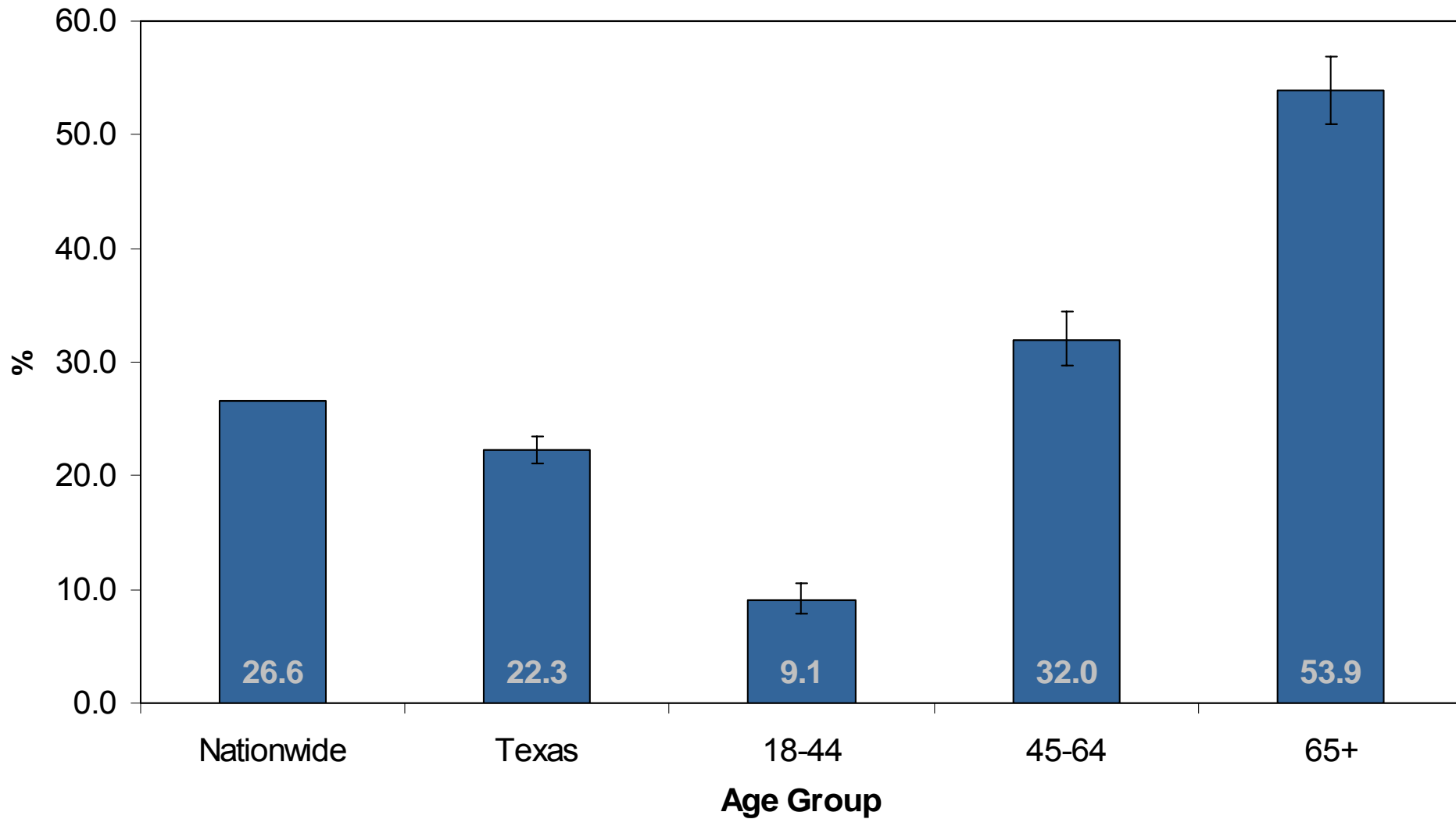
Doctor-Diagnosed Arthritis Texas BRFSS, 1999-2005



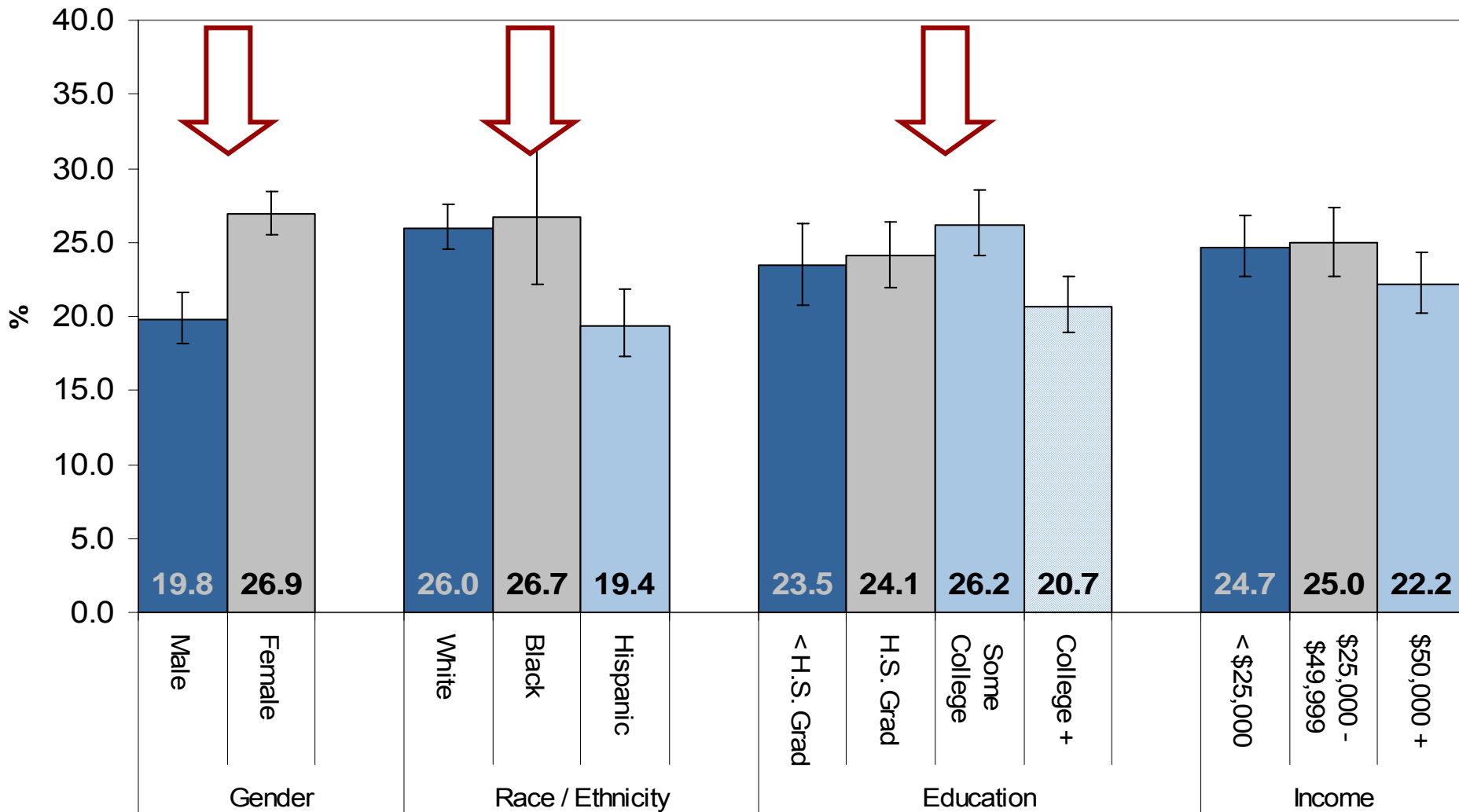
2000 left out due to weighting differences.

Identifying Demographic Differences

Doctor-Diagnosed Arthritis Texas BRFSS, 2005

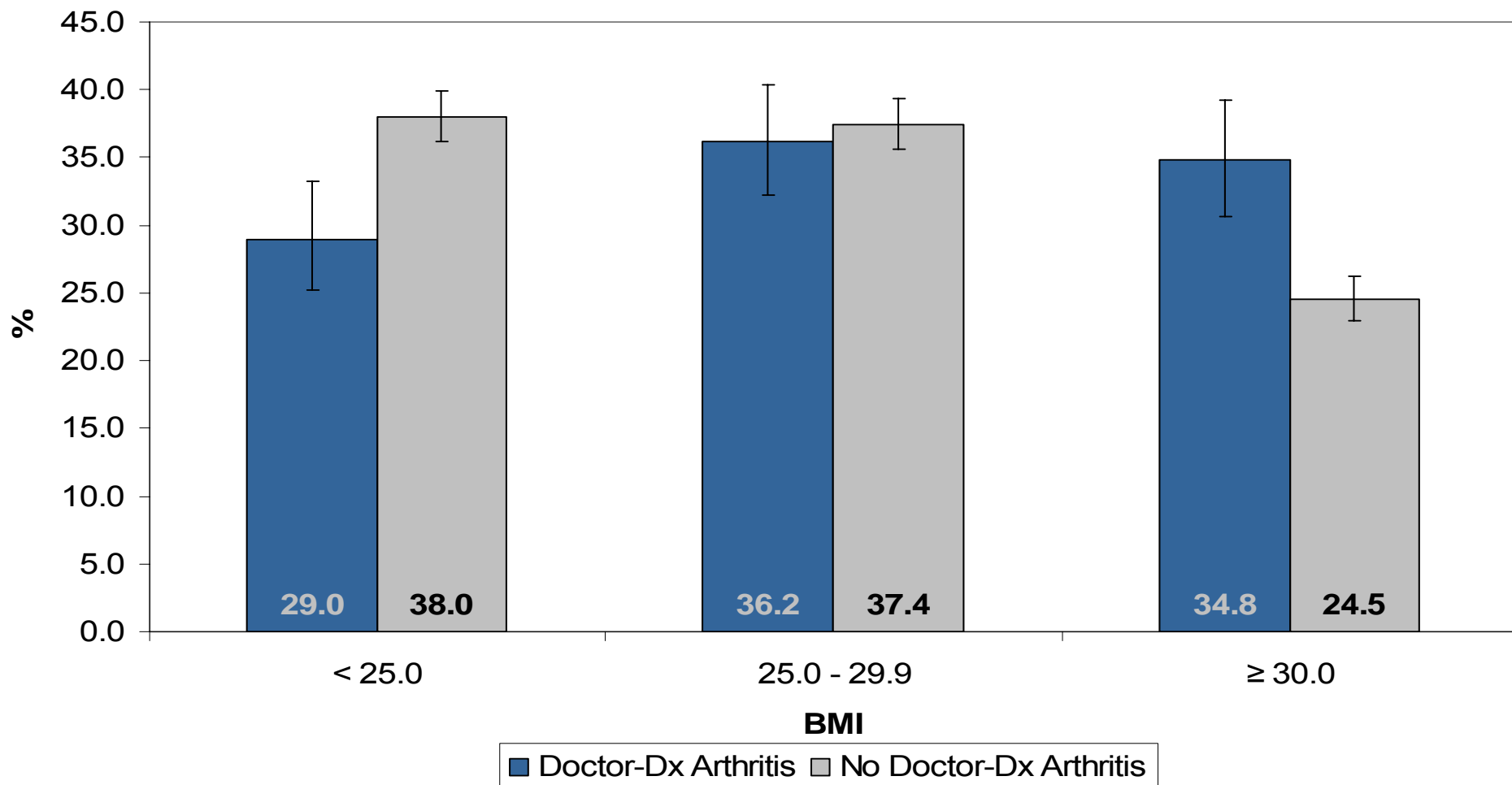


Doctor-Diagnosed Arthritis (Age-Adjusted) Texas BRFSS, 2005

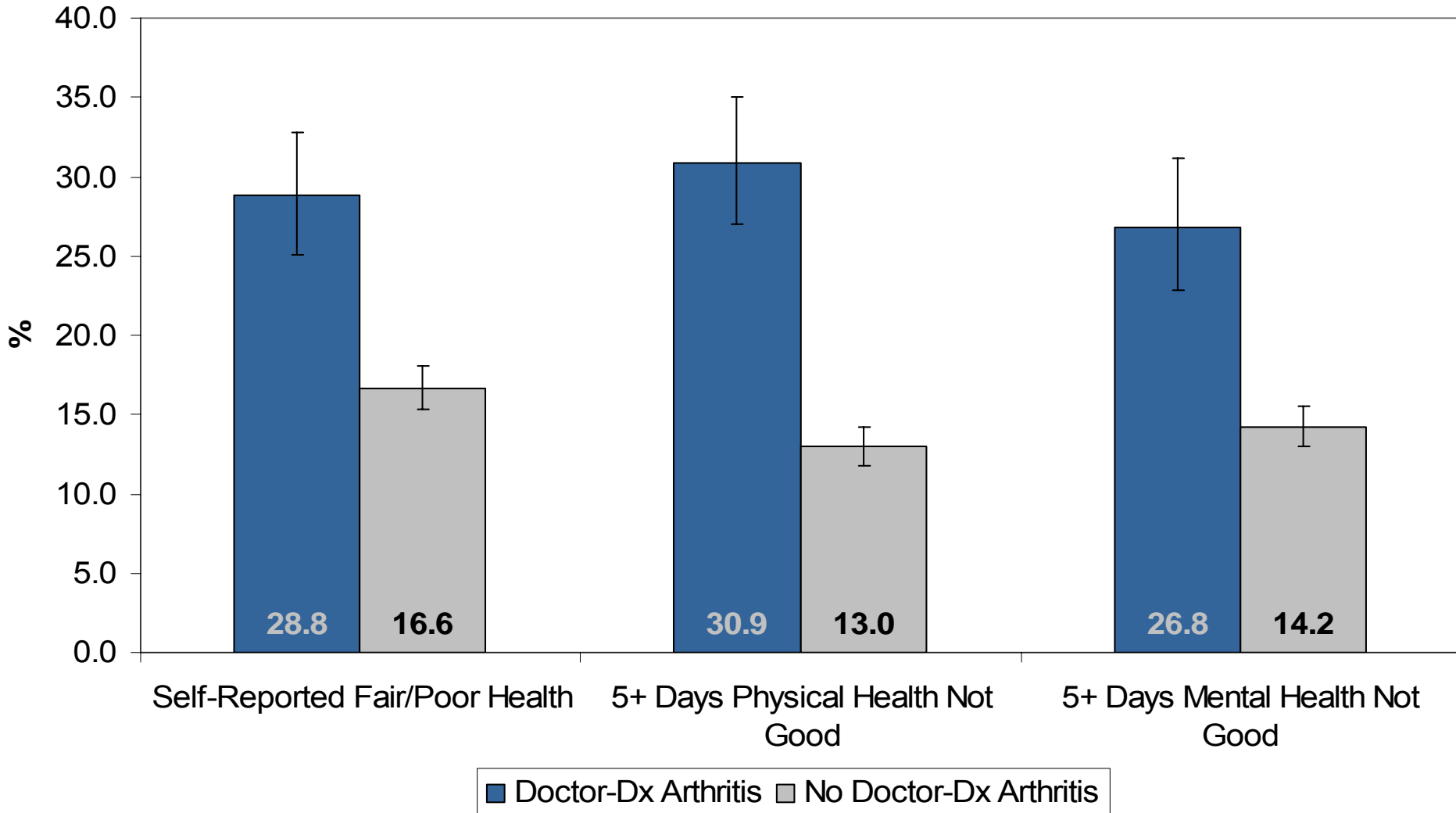


Assessing Risk Factors

Prevalence of BMI by Doctor-Diagnosed Arthritis (Age-Adjusted)
Texas BRFSS, 2005

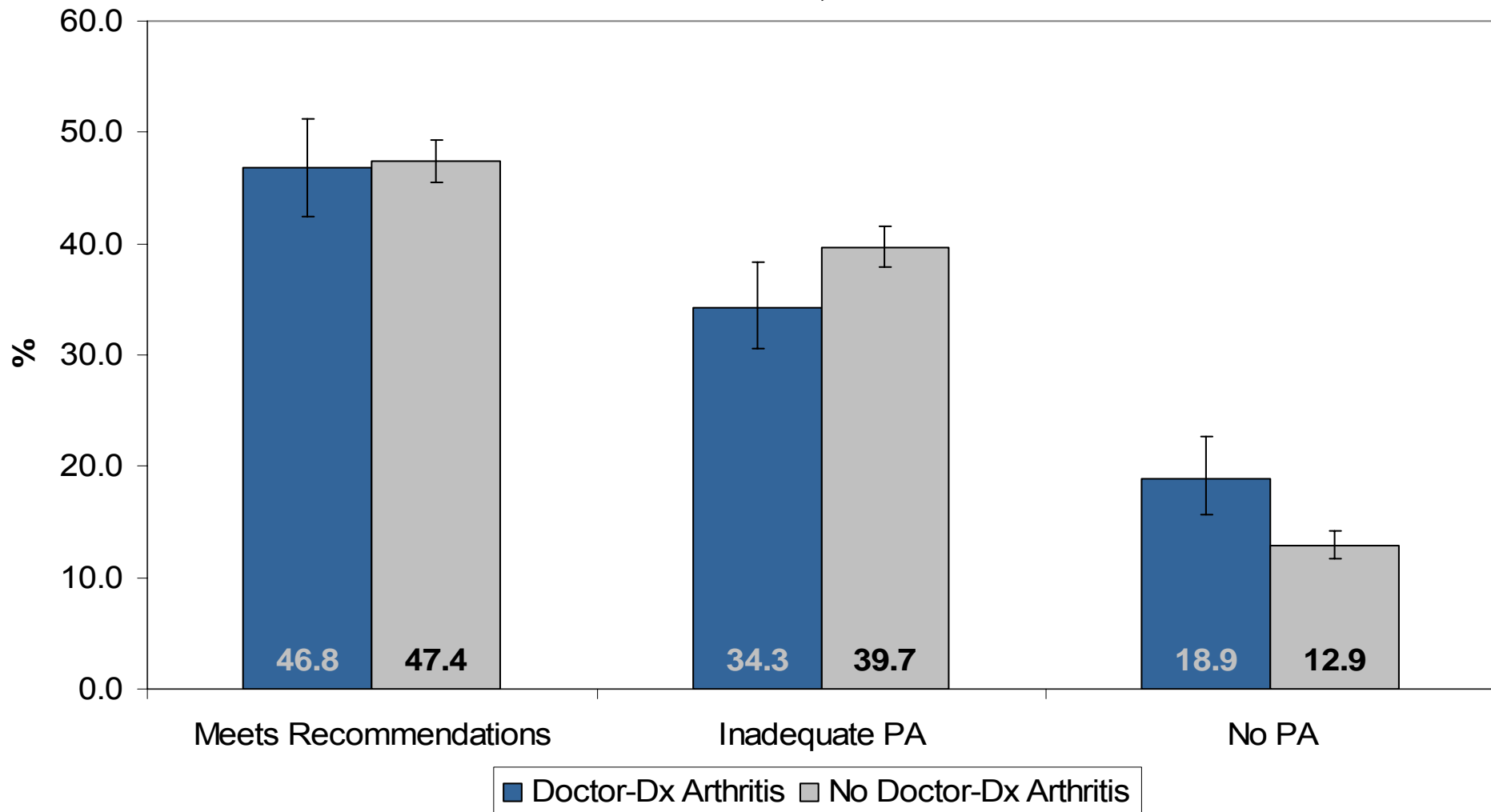


Quality of Life Indicators by Doctor-Diagnosed Arthritis (Age-Adjusted) Texas BRFSS, 2005



Measuring Health-Related Behaviors

**Meets Physical Activity Recommendations by Doctor-Diagnosed Arthritis
(Age-Adjusted)
Texas BRFSS, 2005**



Measuring Progress Toward State and National Objectives

Healthy People 2010

Texas and Health People 2010 Objectives for Arthritis

Objective	Texas BRFSS (Year) Age-Adjusted	HP 2010 Target*
Obj. 02-02: Activity Limitation Due to Arthritis	34.5% (2005)	33%
Obj. 02-04a: Overweight & Obese Adults with Arthritis Who Receive Counseling for Weight Reduction	????? (2007) 30.4% (2003)	46%
Obj. 02-04b: Adults with Arthritis Who Receive Counseling for Physical Activity or Exercise	????? (2007)	67%
Obj. 02-07: Seeing a Health Care Provider Among Adults with CJS**	69.4% (2005)	61%
Obj. 02-08: Arthritis Education Among Adults with Arthritis	????? (2007)	13%

* Revised targets can be found at the following link:
<http://wonder.cdc.gov/data2010/> .

** Chronic Joint Symptoms is defined in the BRFSS as having had any symptoms of pain, aching, or stiffness in or around the joint (excluding the back or neck) during the past 30 days that first started more than three months ago.

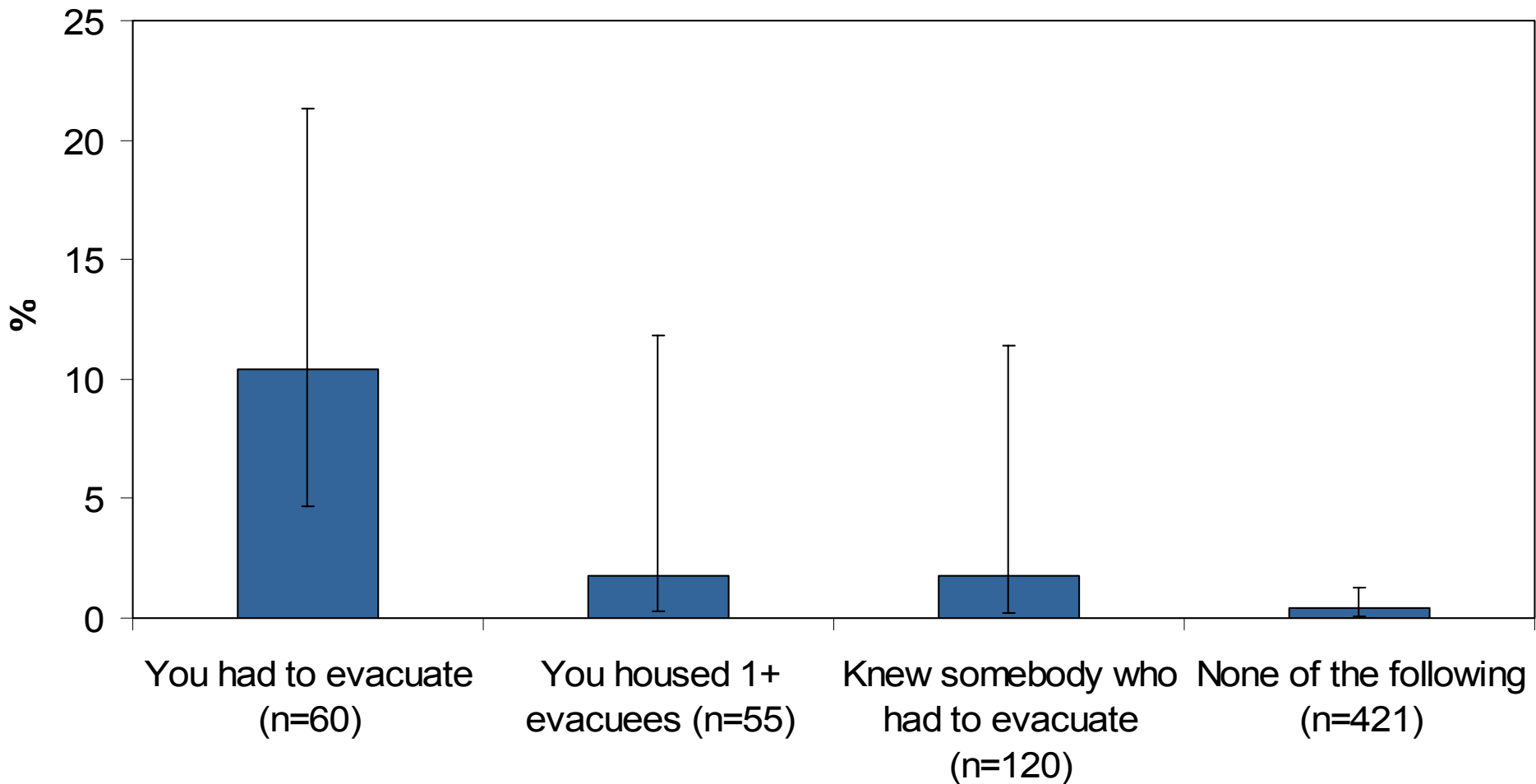
Addressing Emergent and Critical Health Issues

Hurricane Impact
Assessment

Hurricane Impact Assessment

- November / December 2005 (CDC)
 - Focused on evacuation
 - Depression / grief
- 2006 Questions (State)
 - Hurricane relocation
 - Will allow us to see the impact on our health care system

**Prevalence of Depression, Stress, or Grief Interfered With
Ability to Function by Evacuation Status
Texas BRFSS, November/December 2005**



Other Arthritis Information

Type of of Doctor-Diagnosed Arthritis

Texas BRFSS, 1999

Type	Age-Adjusted	Not Age-Adjusted
Osteoarthritis / Degenerative Arthritis	19.4%	24.6%
Rheumatism	4.5%	5.0%
Rheumatoid Arthritis	17.2%	13.6%
Lyme Disease	Nobody Reported	
Other	13.5%	12.9%
Don't know / Not sure	45.4%	44.0%

Chronic Joint Symptoms (CJS)

- Having had any symptoms of pain, aching, or stiffness in or around the joint (excluding the back or neck) during the past 30 days that first started more than three months ago.

CJS Facts

- 67.7% of those with doctor-diagnosed arthritis have chronic joint symptoms.
- 89.4% of this population ever saw a health professional for their CJS.
- Only 52.2% of those without Doctor-Diagnosed Arthritis ever saw a health professional for their CJS.

Future Thoughts

- Type of Arthritis
- Treatments available based on type

BRFSS Limitations

- Telephone coverage
 - Only landlines can be used
 - Technology barriers
- Non-response
- Self-reporting
- Recall bias
- Language barriers
- Non-institutionalized population (excludes nursing homes)

BRFSS Products

- Data requests
- Texas Risk Factor Reports
- Annual BRFSS survey data
- Special point-in-time surveys
- Interactive Data Queries

Interactive Data Queries

- [Texas BRFSS](#)
- [CDC BRFSS](#)

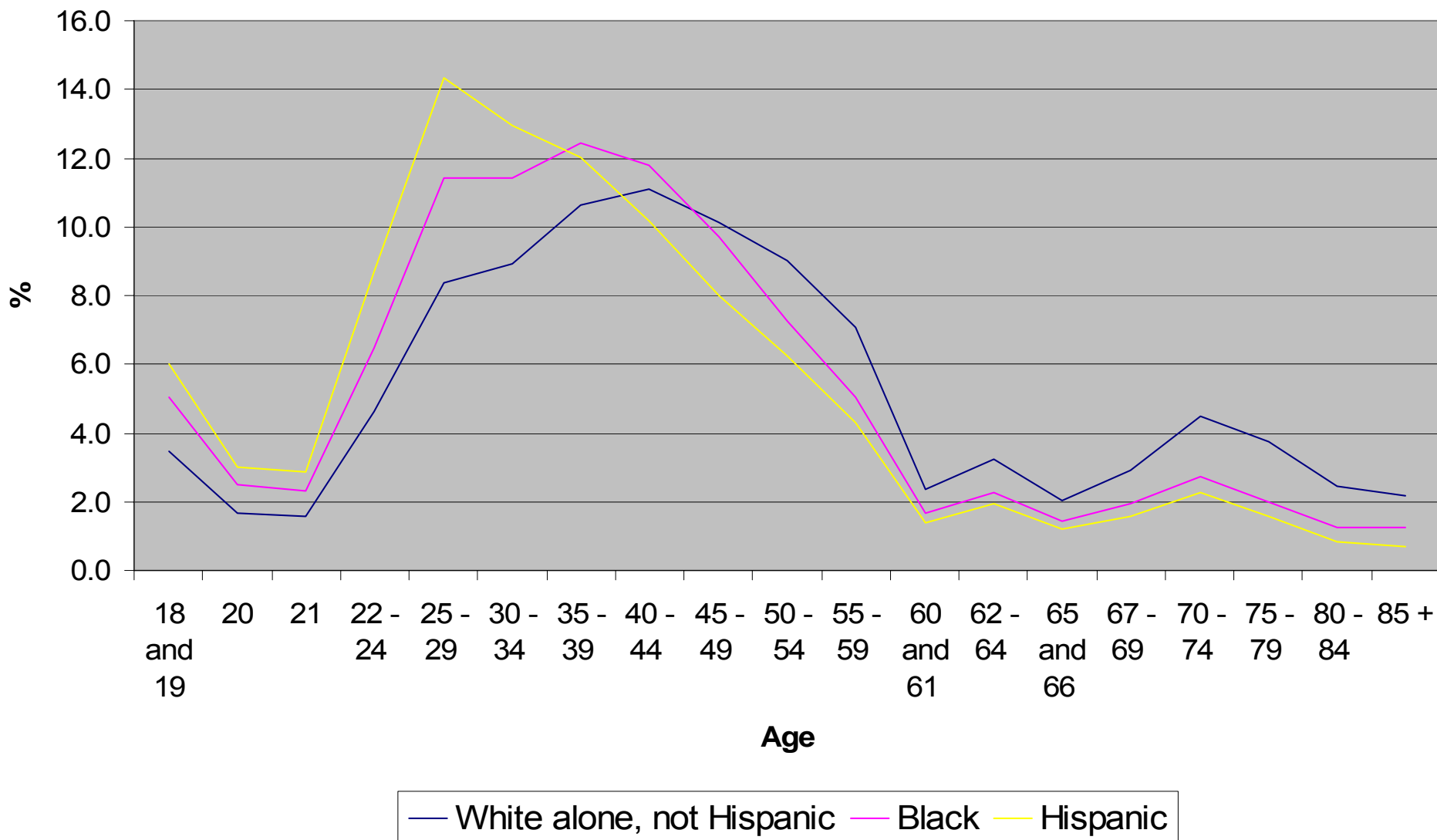
Contact Information

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- Texas BRFSS website
 - www.dshs.state.tx.us/chs/brfss
- CDC BRFSS website
 - www.cdc.gov/brfss

How to add questions to the Texas BRFSS...

- \$2,000 - \$3,000 per question
- Late spring / early summer: Core questions and optional modules sent to Health Survey Users Group (HSUG).
- Proposals due about three weeks prior to HSUG quarterly meeting.
- HSUG discusses each proposal in July meeting.
- Pre-testing questions – August / September
- October – finalize questionnaire

Age Distribution by Race / Ethnicity of 18+ Population in Texas



Adjusted vs. Unadjusted

- | | |
|------------------------------------|------------------------------------|
| ■ White: 26.0%
(24.5 – 27.6) | ■ White: 27.9%
(26.3 – 29.6) |
| ■ Black: 26.7%
(22.2 – 31.7) | ■ Black: 24.6%
(20.1 – 29.8) |
| ■ Hispanic: 19.4%
(17.3 – 21.8) | ■ Hispanic: 12.3%
(10.6 – 14.2) |

Age-Adjusting Example

Texas Hispanic Population vs. U.S. Age Standard Population

